PTO/SB/08A (10-01)

Approved for use through 10/31/2006, OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number 10/706,575

Filing Date November 12, 2003

First Named Inventor Frank L. Hall

Group Art Unit 1725

Examiner Name S. Heinrich

Attorney Docket Number 2269,4718 1US (00,0316,01/US)

			U.S. PATENT D	OCUMENTS	
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of	Press Column 1 has 11th an Palance
Initials *	No.'	Number - Kind Code ² (if known)	MM-DD-YYYY	Cited Document	Pages, Cohumns, Lines, Where Relevant Passages or Relevant Figures Appear
SML		US - 5,320,789	06/1994	Nishii et al.	
		US-5,815,232	09/1998	Miyazaki et al.	
		US-			*
		US-			
		US-			

	FOREIGN PATENT DOCUMENTS										
Examiner	Cite	Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines,						
Initials*	No.	Country Code ³ - Number ⁴ - Kind Code ⁵ (If known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T ⁴					
		JP63105042A	05/1988	Toyoda Gosei KK		X					
- 14		JP63070525A	04/1992	Mitsubishi Deenki KK		x					
3mf		JP411068004A	03/1999	Sony Corp.		х					
	<u> </u>										
											
	1										

Examiner Signature	Heinrih	Date Considered	May 25, 2007

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

Inter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/2006, OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

- 12		OILL	Junitage	TWOIR REGULATION THE TOTAL	o paraona ne requiado no responsa no a conse	CONTROL BUOM BUOM CE UCCS II CON	THE REAL PROPERTY OF THE PROPE	TIPE .
Substitute for form 1449A/PTO						Complete if Known	(atta	
	INFO	RMATION	DIS	SCLOSURE	Application Number	10/706,575	10. 1. W 3/	$\overline{}$
	STATEMENT BY APPLICANT				Filing Date	November 12, 20	003	\mathcal{T}
	~	ENIENT D		LICINI	First Named Inventor	Frank L. Hall	1 6 2006	I
					Group Art Unit	1725	3	<i>ग</i>
		(use as many she	ets as n	ecessary)	Examiner Name	S. Heinrich	32 18	
	Sheet	l	of	1	Attorney Docket Number	2269-4718.1US	00-8374.0MB8	フ

	1	1	U.S. PATENT D		
Examiner Initials *	Cite No. ¹	Number - Kind Code ³ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
mt	<u> </u>	US-3,913,216	10/21/1975	Ballonoff	
		US- 4,514,898	05/07/1985	Przybysz et al.	
		US- 5,310,624	05/10/1994	Ehrlich	
		US- 6,437,052 B1	08/20/2002	twasa et al.	
		US- 6,720,522 B2	04/13/2004	ikegami et al.	
		US-			

Examin	er Cite	Foreign Patent Document		Name of Patentee or	Pages, Cohmus, Lines,	
Initials		Publication Date	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T ⁶	
L		JP 360015985A	01/1985	Fujitsu Ltd		Х
\perp		JP 360123084A	07/1985	Matsushita Electric		×
		JP 363117421A	05/1988	Nikon Corp		×
		JP 407030121A	01/1995	Sanyo Electric		X
L_		JP 409325365A	12/1997	Hitachi Ltd		х
Soul		JP 2000012726A	01/2000	Sony Corp		×

Examiner Signature	S. Heinrich	Date Considered	May 25, 2007

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08A (10-01)

Approved for use through 10/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless a contains a valid OMB control number

1	g	neer, to hap	erwork Reduction Act of 1995, it	persons are required to respond to a con-	COOLOG SECULEMENT SECULEMENT AND COLOG SECULEMENT
Substitute forberm 1449A/PTQL					Complete if Known
INFO	RMATIO	N DI	SCLOSURE	Application Number	10/706,575
STATEMENT BY APPLICANT				Filing Date	November 12, 2003
DIA		DIA	·	First Named Inventor	Frank L. Hall
				Group Art Unit	1725
	(use as many s	sheets as	necessary)	Examiner Name	S. Heinrich
Sheet	1	of	1	Attorney Docket Number	2269-4718.1US (00-0316.01/US)

			U.S. PATENT D	OCUMENTS	
Examiner Initials *	Cite No.	Document Number Number - Kind Code ¹ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
znus		US-5,255,431	10/1993	Burdick	
7		US- 5,923,966	07/1999	Teramoto et al.	
1		US- 8,156,484	12/2000	Bassous et al.	
MI		US- 6,419,996	07/2002	Mueller et al.	-
		US-			
ι		US-			
	1	US-			
		US-			

		FOREIGN P	ATENT DOCU	MENTS		
Examiner	Cite	Cite Foreign Patent Document		Name of Paterace or	Pages, Columns, Lines,	
Initials*	No.	Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T [♦]
			ļ. —			
			-			
						
	 		1			

Examiner	11.	~ [Date			
Signature	>- Hein	rich-	Considered	119	57	1001

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

[&]quot;EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspio.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08A (10-01)

Approved for use through 10/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

work Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE

	Complete if Known	1
Application Number	10/706,575	
Filing Date	November 12, 2003	
First Named Inventor	Frank L. Hall	
Group Art Unit	1725	
Examiner Name	S. Heinrich	
Attorney Docket Number	2269-4718 IUS (00-0316 01/US)	

STATEMENT BY APPLICANT					1101011001 12, 2005		
01/11/	31/131/1	<i>D1</i> /	Di Critt	First Named Inventor	Frank L. Hall		
			•	Group Art Unit	1725		
	(use as many	sheets as neces	sary)	Examiner Name	S. Heinrich		
Sheet	1	of	2	Attorney Docket Number	2269-4718.1US (00-0316.01/US)		
			~~			_	

			U.S. PATENT D	OCUMENTS	
Examiner Initials *	Cite No.	Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
SMI	-	US-4,953,385	09/04/1990	Aoki et al.	
-		US-			
		UŞ-			
-		US-			
		US-			
	1	US-			
		US-			
		US-	_		
		US-			

Examiner	Cite	Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
Initials* No.1		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document		T4
suf		JP 03018806A	01/28/1991	Nippon Telegraph & Telephone Corp		×
				· · · · · · · · · · · · · · · · · · ·		
			<u> </u>			

() () () () () () () () () ()	Examiner Signature	S. Heinrich	Date Considered	May 25, 2007
---	-----------------------	-------------	--------------------	--------------

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.usnto.gov or MPEP 901.04. that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO				Complete if Known		
INFOR		N DYCC	COURS	Application Number	10/706,575 November 12, 2003 . Frank L. Hall	
			LOSURE	Filing Date		
STATE	MENT	BY APP	LICANT	First Named Inventor		
				Group Art Unit	1725	
	ise as many s	sheets as nece:	sary)	Examiner Name	S. Heinrich	
Sheet	2	of	2	Attorney Docket Number	2269-4718.1US (00-0316.01/US)	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
conf		IBM Technical Disclosure Bulletin (TDS), "Short Cycle Prototype Three-Dimensional Molded Circuit Boards." January 1, 1991, Volume 33, Issue 8, page 304.	
		·	
•		3	
		· · · · · · · · · · · · · · · · · · ·	

Examiner Signature	S. Hemrich	Date Considered	May	25 2007	
Orginature	- (-	Considered		3, 600	

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.